Brother NC-8000 Print Server

Product Overview

PRODUCT OVERVIEW FOR THE BROTHER NC-8000

This document is designed to explain in greater detail some of the options provided by the NC-8000 and the more sophisticated / unique features that are included. This document is split into different sections Network Printing, Internet Fax, Scan to E-mail / Network Scanner, Forwarding E-mail to E-mail or Fax to E-mail, Web Based Management, Network Management and Relay Broadcasting. For convenience, the first section gives a brief overview of the NC-8000's stronger features; it is followed by a more in-depth discussion of the features listed in the first section. First section text is placed in a box, for example:

1. Network Printing This is followed by a second section (a more detailed explanation), which is underlined: **1. Network Printing**

Available for MFC-9650, MFC-9870 and FAX-8750P

	Optional NC-8000 Ethernet Network Print Server
	Brother MFC-9650 Multi Function Centre And FAX-8750P
	Brother MFC-9870 Multi Function Centre

Product Overview

As Multi Function Products have developed over the last few years their success has let to further developments in added features and faster print speeds. The key feature of this development is a demand for a fast, compact workgroup version. The MFC-9870 is part of an exciting new range of flatbed laser MFC's, which is moving digital based copier products onto the desktop. The MFC-9650 is an ADF (Automatic Document Feeder) laser based MFC that provides printing, scanning and copying. For more information on these products please see relevant "Reviewers Guides".

The FAX8750P is a high-end laser based fax solution with fast V.34 33.6K modem speed with a print engine capacity of 12ppm.

With optional lower tray to increase paper capacity and the optional NC-8000 providing Ethernet Network Connectivity provides for a high-end office solution for printing, copying, faxing and scanning, creating a one-stop communication centre for all your needs.

NC-8000 Features

The NC-8000 offers a whole range of additional features for use on the LAN and integrates the FAX/MFC with the Internet. The new ITU-T standard the T.37 recommendation has integrated conventional fax machines with IP networks allowing a step forward in Fax Technology. The NC-8000 follows the ITU-T and T.37 standards and requires the installation of the TCP/IP (the most popular protocol associated with the Internet and LAN's), SMTP and POP3 mail protocols. The e-mail client used for sending information must be MIME compatible.

1. Network Printing

Use your Brother FAX/MFC as a true Network Printer or share your printer as a workgroup printer on your LAN and print at upto speeds of 12ppm. Also include is Brother's own Peer-to-Peer software allowing to you print over the network in a Windows® 95, 98, 98SE, NT® WS 4.0 and Windows® 2000 Professional environment. Supplied with Brother's own full-featured 600dpi GDI driver offering a seamless Network Printing Solution.

2. Internet Fax

Send and receive faxes over your IP network, the NC-8000 supports SMTP and POP3 protocols allowing documents to be transmitted over the LAN or the Internet to other Internet Fax machines.

3. Scan to E-mail/Network Scanner

Transmit your documents as e-mail attachments to other users on your LAN or the Internet. The ITU-T T.37 Simple Mode recommendation supports Tiff-f file attachments that can be viewed with the Imaging software included with Windows® 95, 98, 98SE, NT® WS 4.0 and Windows® 2000 Professional or the TIFF-F viewer supplied on the NC-8000 CD-ROM.

4. Forward E-mail to E-mail, Fax to E-mail or Fax to Fax

Using the NC-8000 it possible to forward e-mail sent to the FAX/MFC to other e-mail addresses on your LAN or across the Internet, or alternatively forward incoming faxes destined for the FAX/MFC as TIFF-F file attachments to other faxes with Internet capability (the Internet fax must support the ITU-T T.37 Simple Mode recommendation) or to other e-mail addresses on the LAN or across the Internet.

5. Automatic Digital Fax Archiving

With this feature you can ensure important faxes never go missing. The NC-8000 can be used to forward all incoming faxes to an e-mail server ensuring important documents are automatically digitally archived to a central point.

6. Web Based Management

The NC-8000 has a built in web server that can be configured from any web browser. This allows the user or administrator to configure all set-up procedures, Fax settings, Internet Setting. Additionally the status of the Multi Function Centre can be monitored and errors displayed when the machine is out of paper or toner is running low.

7. Network Management

Of-course manageability is key to any network ready product, that's why the NC-8000 includes Brother’s own Network Management tool BRAdmin32. This allows all Fax/Printer and Network functions to be configured via an explorer style window.

8. Relay Broadcasting

Relay Broadcasting is similar to the Fax function “Broadcast”, but Relay Broadcasting allows you to transmit the first part of the broadcast over an IP network and the second part of the Broadcast over conventional analogue land lines.

Specifications for NC-8000

- Windows® 95, 98, 98SE, NT® WS 4.0 and Windows® 2000 Professional
- Unix systems supporting LPD

- TCP/IP (including the following)
- LPR/LPD
- POP3
- SMTP
- NetBIOS
- WINS
- DHCP
- BOOTP
- HTTP

- 10baseT Ethernet Network

- Windows®95/98 Peer-to-Peer Printing
- Windows® NT4.0 TCP/IP Printing
- Windows® 2000
- Unix TCP/IP Printing

- T.37 Simple mode
- Tiff-F Profile-S
- Resolution: 200x100, 200x200, 204x97, 204x194dpi
- Coding System: MH
- Fax Forward/Paging (Some Brother models may not support this feature. Refer to the Operations Manual for your Brother model to verify if this feature is available).
- Internet FAX Relay
- E-mail Relay
- Broadcast Relay

- CPU: Pentium 75 or Higher
- RAM: 8MB or greater (16MB recommended) for Windows®95/98
  16MB or greater (32MB recommended) for Windows®NT4.0
  64MB or greater (128MB recommended) for Windows® 2000 Professional

- Web Based Management
  Internet Explorer 3.02a or later
  Netscape Navigator 3.0 or later

- BRAdmin32 Management

1. Network Printing

The FAX/MFC with additional NC-8000 transforms the features of the machine into a truly diverse “Multi Function Centre”. It can now be used as a workgroup printer at speeds of up to 12ppm. Small groups of users can now send their print jobs directly over their network to the FAX/MFC.

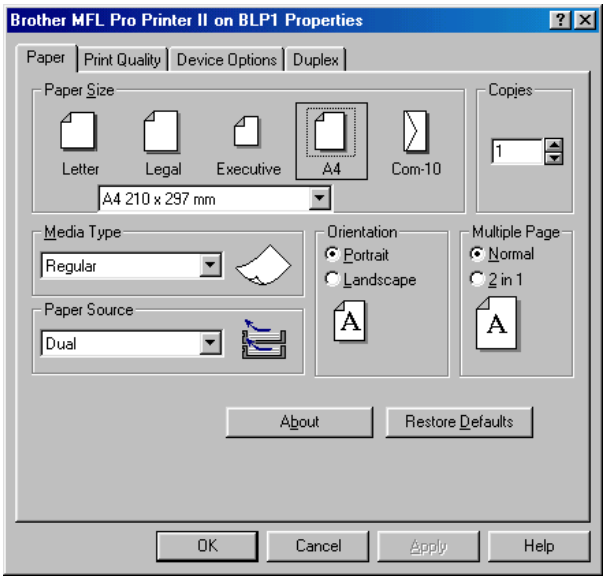


Figure 1 Printer Driver Features

The driver features various options for different paper configurations; most types of paper are supported including the printing of envelopes. Different types of media are supported and the option for the additional paper tray so the FAX/MFC will automatically use tray 2 when the paper is empty in tray 1. Multiple page printing is available with the option to select 2-in-1 printing with optional orientation.

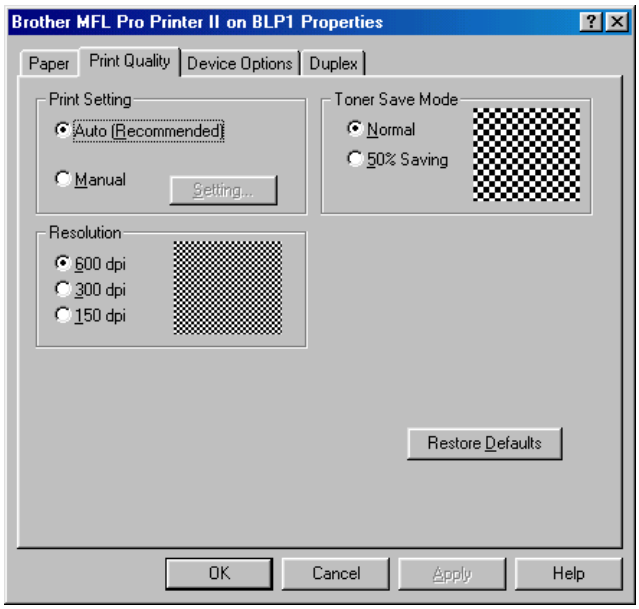


Figure 2 Print Quality Options

Print Quality can be adjusted to suit your needs; the default 600dpi can be altered for your preference to either 300dpi or 150dpi. To extend the consumable life the Toner Save Mode can be reduced to 50%.

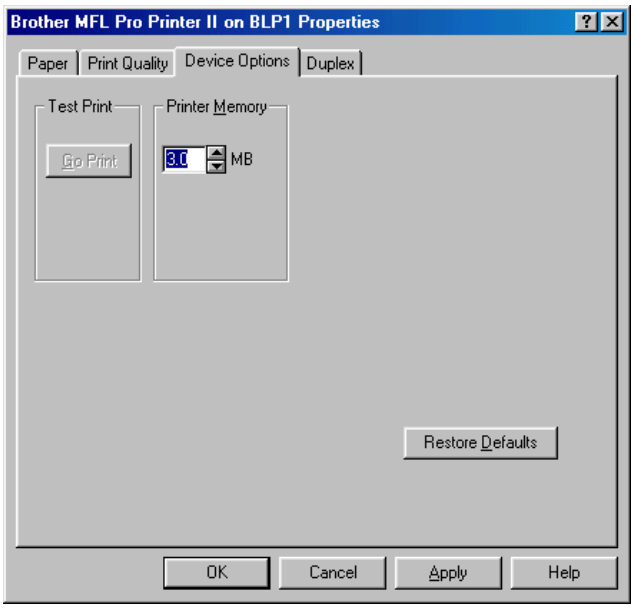


Figure 3 Device options

The device options tab from the driver allows you to specify the machines memory taking into consideration any additional memory that may have been installed in the machine.

2. Internet Fax

Internet Fax gives you the option of transmitting your documents from the FAX/MFC across the Internet or Intranet to another Internet Fax machine. This allows users to send faxes over a standard IP Network, significantly reducing transmission call costs and also reducing transmission speeds to as little as 5 seconds (the conventional handshaking protocols that establish connection are not required). By using the FAX/MFC machine this way, no special PC is required as the user simply uses the FAX/MFC machine in the same way as they would if sending a FAX over an analogue line. They simply press the appropriate Speed dial or one-touch dial and the Internet Fax document is transmitted over the Internet.

3. Network Scanner/Scan to E-mail

Documents can be scanned and then automatically e-mailed to other network users on the LAN. Documents can be stored in a Public Folder of an Exchange folder so that other Microsoft clients can view them. Alternatively, the document can be delivered straight to the persons in-box for their convenience.
The only additional requirement is a software application to view the Tiff-f file attachments. A viewer is included with the NC-8000 (Scansoft Pagis Pro) or alternatively there is a viewer included as standard with Windows® 95, 98, 98SE, NT® WS 4.0 and
Windows® 2000 Professional

4. Forwarding E-mail to Fax/Fax to E-mail/E-mail to E-mail

This facility allows you to have your messages forwarded to a different location when away from the FAX/MFC, ensuring you are never far away from your mission critical documents or E-mails. The FAX/MFC with NC-8000 can operate in any combination to ensure that any documents or e-mails destined for your machine can be forwarded to a more suitable location.

Please see “Digital Fax Archiving” for more information into the benefits of Fax-to-E-mail.

5. Automatic Digital Fax Archiving

The NC-8000 transforms your FAX/MFC into a Digital Fax Archiving system. All incoming faxes can be forwarded to an e-mail address for central point administration; ensuring important faxes never go missing. This address could be a Distribution List so everybody in the list receives a copy of the fax. Faxes can also be forwarded to a Public Folder so everybody with an e-mail client can browse the Public Folder to view or print faxes. Faxes are still printed in the conventional manner at the fax machine but a copy can be forwarded to ensure all documents are digitally archived for future reference.

6. WWW Web Based Management

Manage the printer using your favourite web browser. No special Brother software is necessary as the built in network solution of the FAX/MFC acts as a min-web server. Allowing Windows® and non-Windows® users alike to manage their MFC.

Figure 4 FAX/MFC Homepage

Figure 5 Fax Settings

7. BRAdmin32 software

SNMP (Simple Network Management Protocol)

Manageability is essential in today's busy networking environment. Brother's BRAdmin32 application is designed to take away the burden of configuring your printer in a TCP/IP environment. Simply install the software and configure your network printer settings in an easy to use Explorer style user interface.

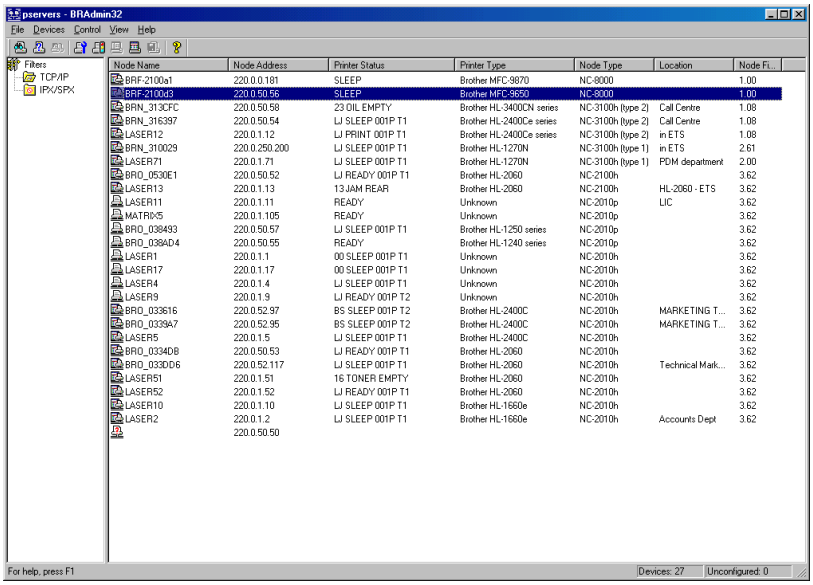

pservers - BRAdmin32
File Devices Control View Help
Filters
TCP/IP
IPX/SPX
Node Name | Node Address | Printer Status | Printer Type | Node Type | Location | Node Fi...
BRF-2100a1 220.0.0.181 SLEEP Brother MFC-9870 NC-8000 1.00
BRF-2100d3 220.0.50.56 SLEEP Brother MFC-9650 NC-8000 1.00
BRN_313CFC 220.0.50.58 23 OIL EMPTY Brother HL-3400CN series NC-3100h (type 2) Call Centre 1.08
BRN_316397 220.0.50.54 LJ SLEEP 001P T1 Brother HL-2400Ce series NC-3100h (type 2) Call Centre 1.08
LASER12 220.0.1.12 LJ PRINT 001P T1 Brother HL-2400Ce series NC-3100h (type 2) in ETS 1.08
BRN_310029 220.0.250.200 LJ SLEEP 001P T1 Brother HL-1270N NC-3100h (type 1) in ETS 2.61
LASER71 220.0.1.71 LJ SLEEP 001P T1 Brother HL-1270N NC-3100h (type 1) PDM department 2.00
BRO_0530E1 220.0.50.52 LJ READY 001P T1 Brother HL-2060 NC-2100h 3.62
LASER13 220.0.1.13 13 JAM REAR Brother HL-2060 NC-2100h HL-2060 - ETS 3.62
LASER11 220.0.1.11 READY Unknown NC-2010p LIC 3.62
MATRIX5 220.0.1.105 READY Unknown NC-2010p 3.62
BRO_038493 220.0.50.57 LJ SLEEP 001P T1 Brother HL-1250 series NC-2010p 3.62
BRO_038AD4 220.0.50.55 READY Brother HL-1240 series NC-2010p 3.62
LASER1 220.0.1.1 00 SLEEP 001P T1 Unknown NC-2010h 3.62
LASER17 220.0.1.17 00 SLEEP 001P T1 Unknown NC-2010h 3.62
LASER4 220.0.1.4 LJ SLEEP 001P T1 Unknown NC-2010h 3.62
LASER9 220.0.1.9 LJ READY 001P T2 Unknown NC-2010h 3.62
BRO_033616 220.0.52.97 BS SLEEP 001P T2 Brother HL-2400C NC-2010h MARKETING T... 3.62
BRO_0339A7 220.0.52.95 BS SLEEP 001P T2 Brother HL-2400C NC-2010h MARKETING T... 3.62
LASER5 220.0.1.5 LJ SLEEP 001P T1 Brother HL-2400C NC-2010h 3.62
BRO_0334DB 220.0.50.53 LJ READY 001P T1 Brother HL-2060 NC-2010h 3.62
BRO_033DD6 220.0.52.117 LJ SLEEP 001P T1 Brother HL-2060 NC-2010h Technical Mark... 3.62
LASER51 220.0.1.51 16 TONER EMPTY Brother HL-2060 NC-2010h 3.62
LASER52 220.0.1.52 LJ READY 001P T1 Brother HL-2060 NC-2010h 3.62
LASER10 220.0.1.10 LJ SLEEP 001P T1 Brother HL-1660e NC-2010h 3.62
LASER2 220.0.1.2 LJ SLEEP 001P T1 Brother HL-1660e NC-2010h Accounts Dept 3.62
220.0.50.50
For help, press F1
Devices: 27
Unconfigured: 0

Figure 5 Actual BRAdmin32 Screenshot showing the FAX/MFC & NC-8000

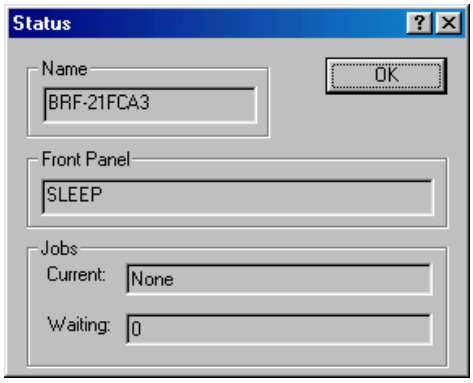
BRAdmin32, Brother's 32-bit Windows® management application, allows system administrators to view the status of their networked Brother products. To configure a networked printer/FAX/MFC, launch the BRAdmin32 application. When your device appears, you will be able to configure the network settings, or alternatively, configure the device itself using an easy to use 'Explorer' style interface.

Key features include:

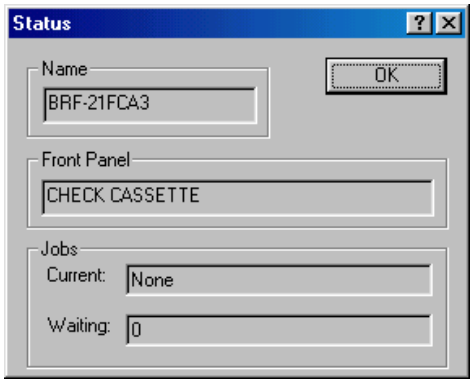
- Minimise the printer down to the taskbar for quick and easy monitoring
- Configure all network settings
- Monitor the FAX/MFC status
- Save printer settings and re-send them to other network connected printers
- Supports the TCP/IP

BRAdmin32 Status

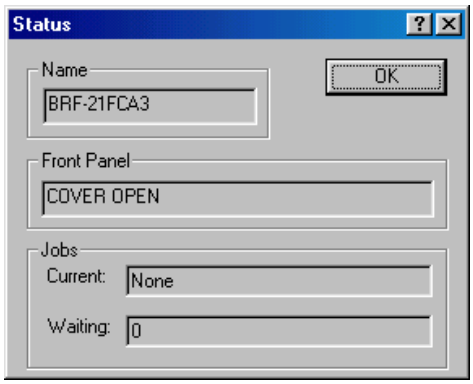
To see the FAX/MFC status, simply launch the BRAdmin32 software and select the Control option and View Status option. Each Brother network ready model is supported by BRAdmin32.



Brother FAX/MFC in Sleep mode ready to print a document



FAX/MFC, no Paper in the paper cassette



FAX/MFC with Front Cover open

More detailed BRAdmin32 Information

Protocol Support. Use the TCP/IP protocol for print server and printer management.

- **Protocol Configuration.** Using BRAdmin32 you can easily enable or disable protocols, change IP address information and configure e-mail settings

- **Easy IP address configuration.** To simplify configuration, each Brother print server is configured with a default IP address, however, changing the print server IP address to match the addressing scheme of your network is simplicity itself - simply select the "Setup Unconfigured Devices" option in BRAdmin32 after "Search Active device" action and enter the IP address that you wish to use. For those people in a DHCP or BOOTP environment, the printer will automatically retrieve an IP address (providing your server is configured correctly).

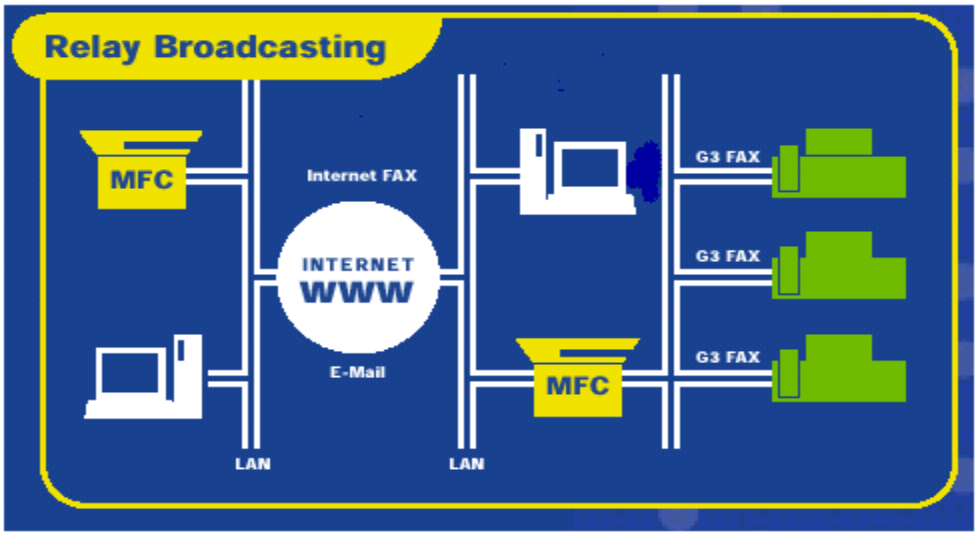
- **Launch Local Web Server.** For those printers that offer web based management, click the launch web browser icon and you will then be able to manage the printer using your favourite web browser.

- **Password Security**. To change printer or print server parameters, you must supply a password. This prevents non-authorised personnel from changing important settings.

8. Relay Broadcasting

Take advantage of local call rates or free internet connection to send your faxes or E-mails. Relay Broadcasting is a unique feature to the ITU-T T.37 Simple Mode recommendation. It allows you to send an e-mail or Internet fax across an IP network (LAN or the Internet) to a compatible Brother Internet fax machine which can then Relay the message to upto 48 other G3 fax machines across analogue land lines.

The easiest way to describe this feature is with the help of an illustration.



From the illustration above we can send an e-mail from any user connected to the LAN across the Internet, which is then relayed to upto, 48 different G3 fax machines. In order to stop unauthorised relaying of messages the Internet fax machine that is to relay the information needs to be configured to trust domains that it will allow access to the Relay feature.

For further information regarding configuring "Relay Broadcasting" for different E-mail clients please see the document entitled "Configuring Relay Broadcasting".

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